REMARKS

Applicants respectfully request favorable reconsideration of this application, as amended.

Claims 1, 3, 4, and 10 have been amended, and Claims 11-14 have been added. Accordingly, Claims 1-14 are pending in the application.

Claims 1-3, 5 and 8-10 were rejected under 35 U.S.C. § 102(b) as being anticipated by Lauffer et al. (U.S. Patent 5,027,253). Reconsideration of the rejection is respectfully requested

Claim 1, as amended, recites that the wiring is formed of a metal different from the metal that forms the first electrode. This is supported by the disclosure at page 13, line 17 to page 14, line 26, for example. Such a structure is not disclosed by Lauffer. The Lauffer reference discloses only a thin film capacitor having a electrodes that are each merely a single plate made of a conductive material (column 11, lines 36-46, and Figure 2 of the reference). Accordingly, the basis for the rejection of Claim 1, and of Claims 2, 3, 5, and 8-10, dependent from Claim 1, has been removed, and the Examiner is respectfully requested to withdraw the rejection.

Furthermore, as to Claim 3, the limitation that the first electrode and first wiring are made of different materials has been inserted into Claim 1, and is therefore no longer needed in Claim 3. In addition, the Lauffer reference at column 10, lines 11-14, refers only to a choice of metals to be used for the core conductors. No lamination is disclosed at that place. The disclosure in Lauffer at column 11, lines 8-24, refers to layers having a dielectric thin film, made from oxides of metals such as Y, Ti, Bi, etc., grown on a high conductivity electrode. Such a dielectric layer is not an electrode. Accordingly, there is no teaching of a laminated electrode made from two different materials, and the referenced Lauffer disclosure does not anticipate Claim 3.

As to Claims 8 and 9, as pointed out above, Lauffer's disclosure at column 11, lines 8-24, refers to oxides of metals such as Ti and Mo (not Cr). There is no disclosure of a connecting layer formed of metallic Cr, Mo, or Ti. Consequently, the referenced disclosure in Lauffer does not anticipate Claim 8 or Claim 9.

As to Claim 10, the disclosure in Lauffer at column 12, lines 7-10, merely states that one of the electrodes of the disclosed thin-film capacitor may be at

ground potential. Claim 10, as dependent from amended Claim 1, is distinguished from the disclosures of Lauffer as discussed above. Furthermore, there is no indication in the referenced Lauffer disclosure of positioning a grounded electrode in relation to a transmission line formed on a multilayer circuit board as specifically recited in Claim 10. The claimed arrangement reduces signal interference as discussed in the specification at page 9, lines 1-11. Accordingly, Claim 10 is further distinguished from the disclosures of the Lauffer reference.

Claims 6 and 7 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Lauffer in view of Summerfeldt et al (U.S. Patent 6,319,542). Reconsideration of the rejection is respectfully requested.

Claims 6-7, are considered to be allowable as being dependent from amended Claim 1, which is now believed to be allowable. However, Claims 6-7 are also considered to be allowable because the disclosures of the secondary reference, Summerfeldt, do not remedy the deficiencies of the primary reference. Lauffer, the primary reference has been discussed above. In summary, it discloses only a thin-film capacitor having single-layer electrically conductive electrodes with an interposed dielectric

material, which may be deposited on one of the electrodes by conventional thin film deposition procedures. However, the Lauffer reverence does not disclose ruthenium, platinum or palladium as electrode metals.

Summerfeldt, in discussing the prior art relative to his invention, discloses capacitors having electrodes of Ru, Pt, or Pd with a deposited dielectric. However, Summerfelt goes on to teach that such electrodes are subject to certain problems that are overcome by his use of lightly doped perovskite electrodes in place of such Ru, Pt, or Pd electrodes. In particular, in any two-layer electrodes discussed in the Summerfelt reference wherein the lower layer provides electrical conductivity for connection to other circuit elements, the reference teaches that the electrode layer in contact with the dielectric layer is a lightly doped perovskite, not a metal. This structure is shown in Figure 9 and discussed at column 4, lines 44-50. Accordingly, to the extent that the Summerfelt reference teaches anything about the structure of thin-film capacitors using a deposited dielectric such as strontium titanate, it teaches away from applicant's invention using a metal electrode made from Ru, Pt, or Pd. Furthermore, in Figure 8 any use of Ru metal is not as a

substrate for deposition of a strontium titanate dielectric layer. Rather, the dielectric layer 36 is deposited on an electrode of lightly-doped perovskite, which may be supported on a "sticking layer" (column 4, lines 27-30), which is formed of TiN or alternately of RuO_2/Ru (column 4, lines 30-31). Evidently, such a structure is different from that disclosed and claimed by Applicants.

Accordingly, the Summerfelt reference, taken alone or in combination with Lauffer, cannot make obvious Applicants' thin-film capacitor structure.

New Claims 11-14 have been added and clearly define an invention that is patentably distinct from the prior art.

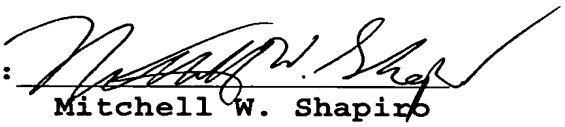
The amendments to Claim 10 are believed to have removed the basis for the rejection of that claim under 35 U.S.C. § 112, second paragraph.

In view of the above amendments and discussion, this application is believed to be in condition for allowance, and an early Notice of Allowance is respectfully requested.

The Commissioner is hereby authorized to charge to Deposit Account No. 50-1165 any fees under 37 C.F.R. § 1.16 and 1.17 that may be required by this paper and to credit any overpayment to that Account. If any extension of time is required in connection with the filing of this paper and

has not been requested separately, such extension is hereby requested.

Respectfully requested,

By: 
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March 19, 2003